

CLAIMS

1. A surface-mount solid electrolytic capacitor comprising:
a capacitor element; an anode lead terminal made of a metal
5 plate and electrically connected to an anode of the capacitor
element; a cathode lead terminal made of a metal plate and
electrically connected to a cathode of the capacitor element;
and a package made of synthetic resin and hermetically sealing
the capacitor element; the lead terminals being embedded in
10 a bottom of the package with lower surfaces of the lead terminals
exposed at a bottom surface of the package,

wherein the anode lead terminal and the cathode lead
terminal are respectively formed with standing pieces at
portions corresponding to side surfaces of the package, the
15 standing pieces having respective outer surfaces exposed at
the side surfaces of the package.

2. The surface-mount solid electrolytic capacitor according
to claim 1, wherein each of the standing pieces is formed at
20 part of the corresponding lead terminal in a width direction.

3. A method for manufacturing a surface-mount solid electrolytic
capacitor, the method comprising the steps of: preparing a lead
frame by punching a metal plate, the lead frame including a
25 pair of side frame portions integrally connected to each other
by a tie bar, one of the side frame portions being formed with
an anode lead terminal while the other one of the side frame

portions being formed with a cathode lead terminal; removably bonding a tape to the lead frame so that the tape crosses the anode lead terminal, the cathode lead terminal and the tie bar; separating the anode lead terminal and the cathode lead terminal 5 from the respective side frame portions and then bending an end of each of the anode lead terminal and the cathode lead terminal to form a standing piece; mounting a capacitor element onto the anode lead terminal and the cathode lead terminal so that an anode and a cathode of the capacitor element are 10 electrically connected to the anode lead terminal and the cathode lead terminal, respectively; molding a synthetic resin into a package for hermetically sealing the capacitor element so that the lead terminals are embedded in the package with a surface of each of the lead terminals and an outer surface of each of 15 the standing pieces exposed; and removing the tape.

4. A method for manufacturing a surface-mount solid electrolytic capacitor, the method comprising the steps of: preparing a lead frame by punching a metal plate, the lead frame including a 20 pair of side frame portions integrally connected to each other by a tie bar, one of the side frame portions being formed with an anode lead terminal while the other one of the side frame portions being formed with a cathode lead terminal; forming a standing piece at each of the anode lead terminal and the 25 cathode lead terminal of the lead frame without separating the anode lead terminal and the cathode lead terminal from the respective side frame portions; mounting a capacitor element

onto the anode lead terminal and the cathode lead terminal so that an anode and a cathode of the capacitor element are electrically connected to the anode lead terminal and the cathode lead terminal, respectively; molding a synthetic resin into 5 a package for hermetically sealing the capacitor element so that the lead terminals are embedded in the package with a surface of each of the lead terminals and an outer surface of each of the standing pieces exposed; and separating the anode lead terminal and the cathode lead terminal from the respective side 10 frame portions.